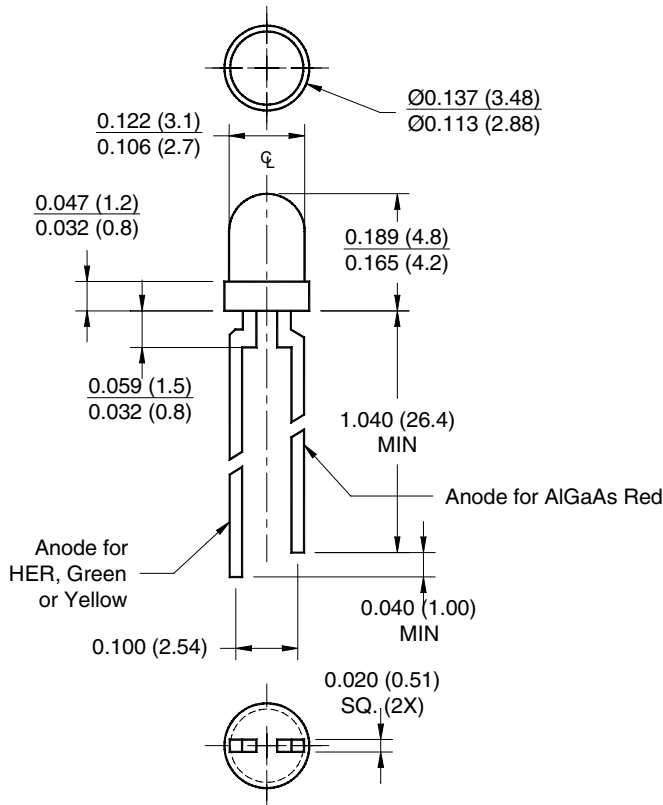


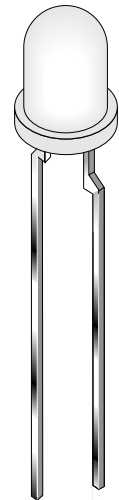
## PACKAGE DIMENSIONS



**NOTES:**

1. Dimensions for all drawings are in inches (mm).
2. Tolerance is  $\pm 0.12''$  unless otherwise specified.

HER / AlGaAs RED	MV6661A
GREEN / AlGaAs RED	MV6461A
YELLOW / AlGaAs RED	MV6361A



## FEATURES

- Excellent luminous uniformity
- Wide viewing angle
- Solid state reliability

## DESCRIPTION

The MV6X61A series is a bicolor, bipolar LED lamp with a wide viewing angle of 100°. In particular, MV6461A offers 4 states - green, red, orange (when AC driven) and off.

## ABSOLUTE MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ unless otherwise specified)

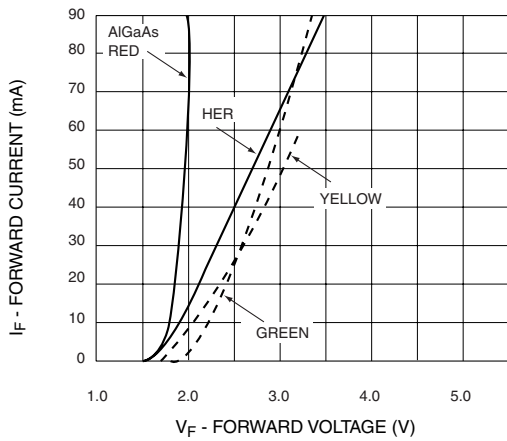
Parameter	AlGaAs Red	HER	Green	Yellow	Units
Continuous Forward Current - $I_F$	30	30	30	25	mA
Peak Forward Current - $I_F$ ( $f = 1.0 \text{ KHz}$ , Duty Factor = 1/10)	90	90	90	60	mA
Reverse Voltage - $V_R$ ( $I_R = 10 \mu\text{A}$ )	5	5	5	5	V
Power Dissipation - $P_D$	135	135	135	95	mW
Operating Temperature - $T_{OPR}$	-55 to +100				$^\circ\text{C}$
Storage Temperature - $T_{STG}$	-55 to +100				$^\circ\text{C}$
Lead Soldering Time - $T_{SOL}$	260 for 5 sec				$^\circ\text{C}$

HER / AlGaAs RED	MV6661A
GREEN / AlGaAs RED	MV6461A
YELLOW / AlGaAs RED	MV6361A

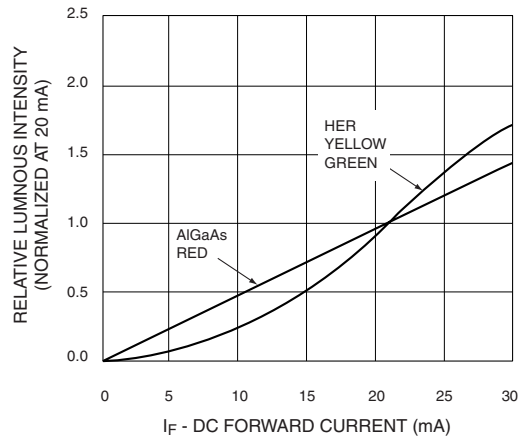
**ELECTRICAL / OPTICAL CHARACTERISTICS** (T<sub>A</sub> = 25°C)

Part Number	MV6661A	MV6461A	MV6361A	Condition
	HER / AlGaAs Red	Green / AlGaAs Red	Yellow / AlGaAs Red	
Luminous Intensity (mcd)				I <sub>F</sub> = 20 mA
Minimum	2.5/2.5	2.5/2.5	2.5/2.5	
Typical	10/10	10/10	10/10	
Forward Voltage (V)				I <sub>F</sub> = 20 mA
Maximum	3.0/2.4	3.0/2.4	3.0/2.4	
Typical	2.1/1.7	2.1/1.7	2.1/1.7	
Peak Wavelength (nm)	635/660	565/660	585/660	I <sub>F</sub> = 20 mA
Spectral Line Half Width (nm)	45/20	30/20	35/20	I <sub>F</sub> = 20 mA
Viewing Angle (°)	100°	100°	100°	I <sub>F</sub> = 20 mA

**TYPICAL PERFORMANCE CURVES**

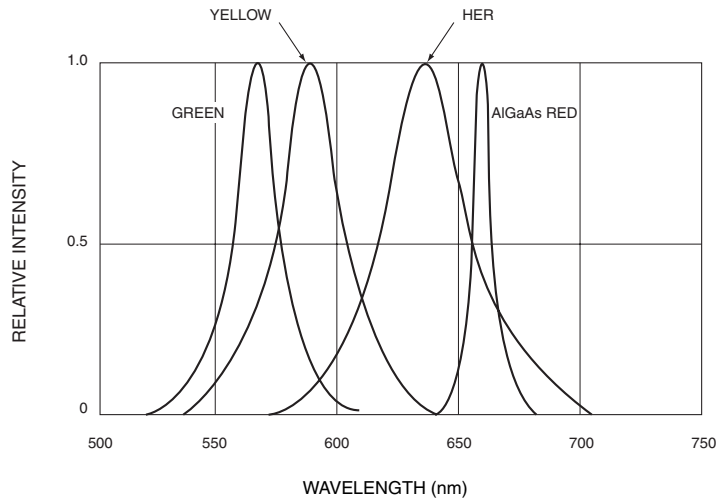


**Fig. 1 Forward Current vs. Forward Voltage**

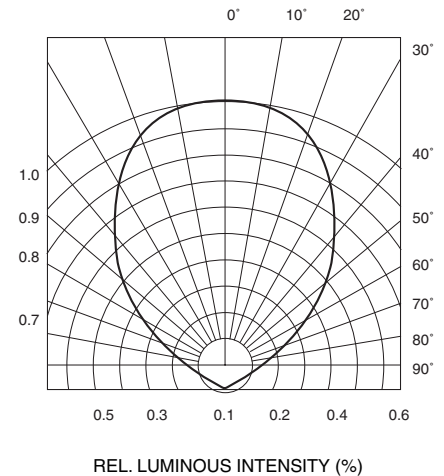


**Fig. 2 Relative Luminous Intensity vs. DC Forward Current**

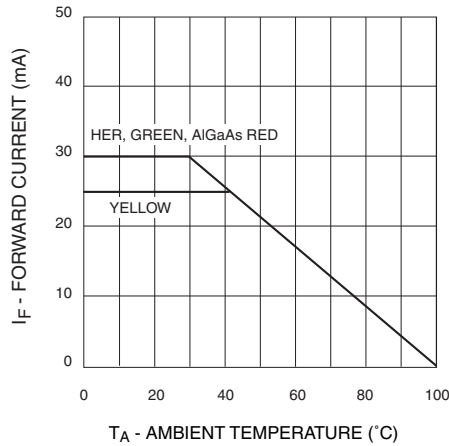
HER / AlGaAs RED	MV6661A
GREEN / AlGaAs RED	MV6461A
YELLOW / AlGaAs RED	MV6361A



**Fig. 3 Relative Intensity vs. Peak Wavelength**



**Fig. 4 Radiation Diagram**



**Fig. 5 Current Derating Curve**

<b>HER / AlGaAs RED</b>	<b>MV6661A</b>
<b>GREEN / AlGaAs RED</b>	<b>MV6461A</b>
<b>YELLOW / AlGaAs RED</b>	<b>MV6361A</b>

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